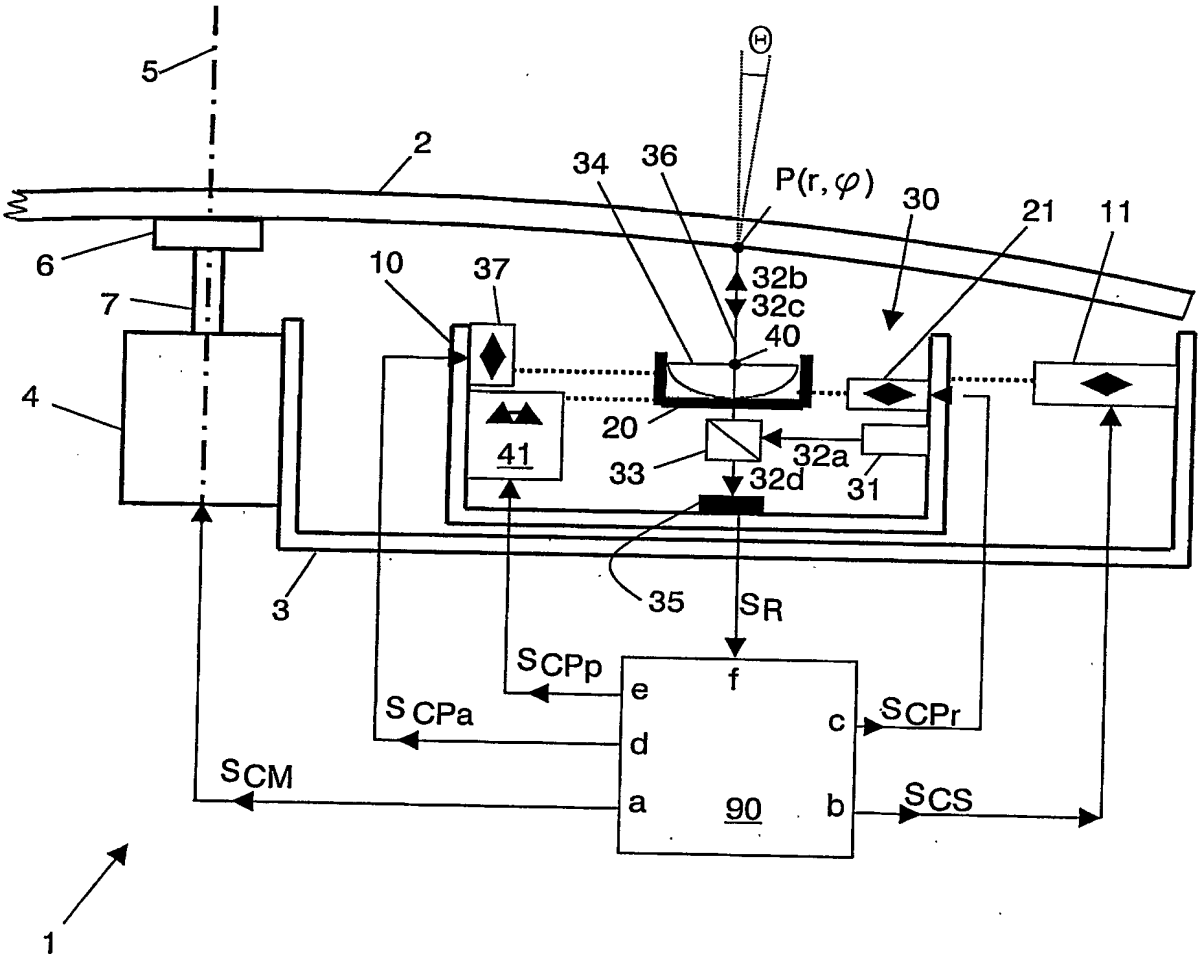
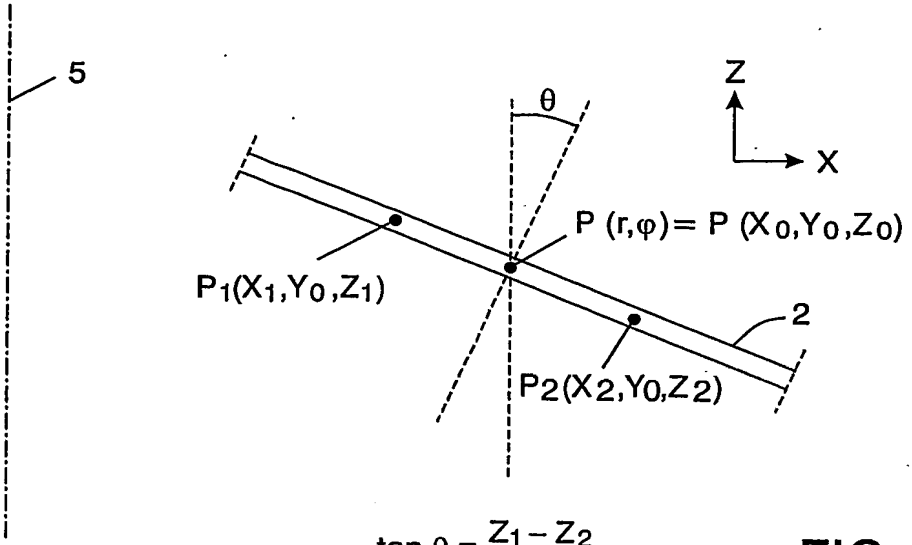
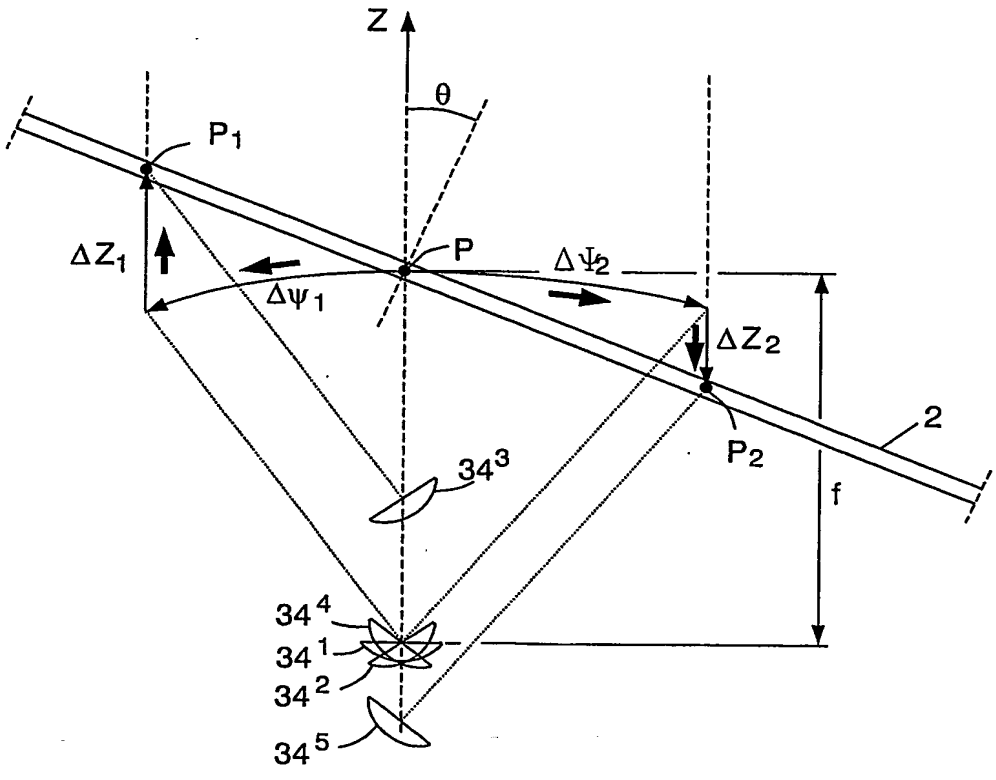

5
2
34
36
P(r, φ)
30
21
11
6
10
37
32b
32c
7
40
4
20
41
33
32a
32d
31
3
35
SR
SCPp
e
f
SCPa
d
c
SCPr
SCM
a
90
b
SCS
1

FIG.1



$$\tan\theta = \frac{Z_1 - Z_2}{X_2 - X_1}$$

FIG.2



$$\tan\theta = \frac{\Delta Z_1 + \Delta Z_2}{f \sin\Delta\psi_1 + f \sin\Delta\psi_2}$$

FIG.3

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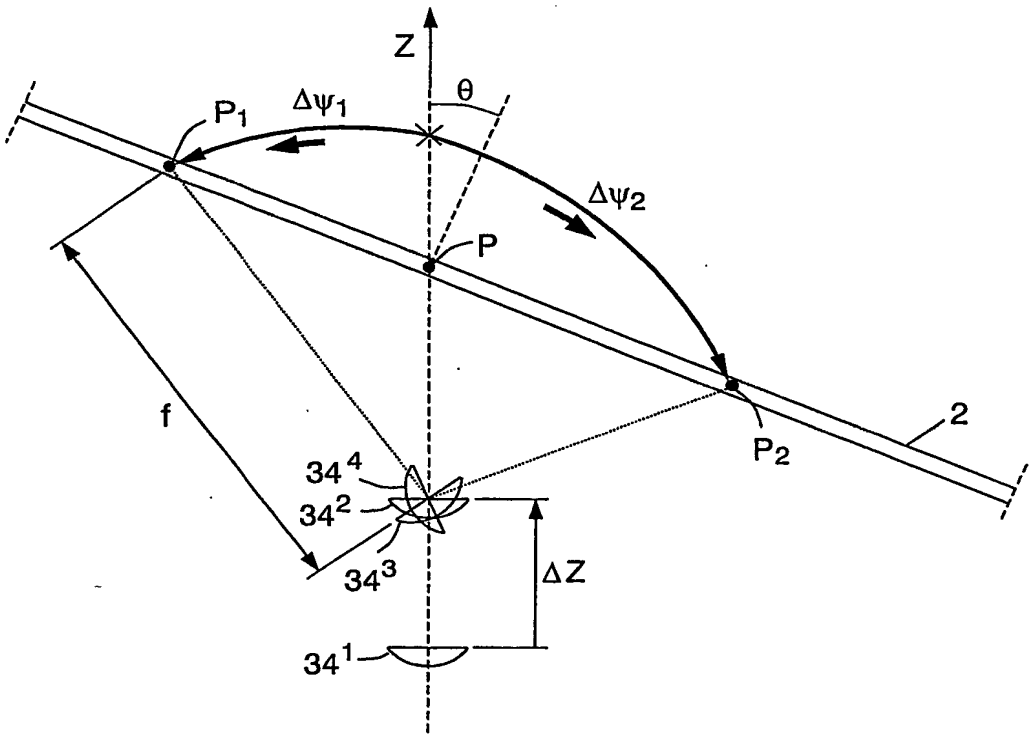

$$\tan\theta = \frac{\cos\Delta\psi_1 - \cos\Delta\psi_2}{\sin\Delta\psi_1 + \sin\Delta\psi_2}$$

FIG.4

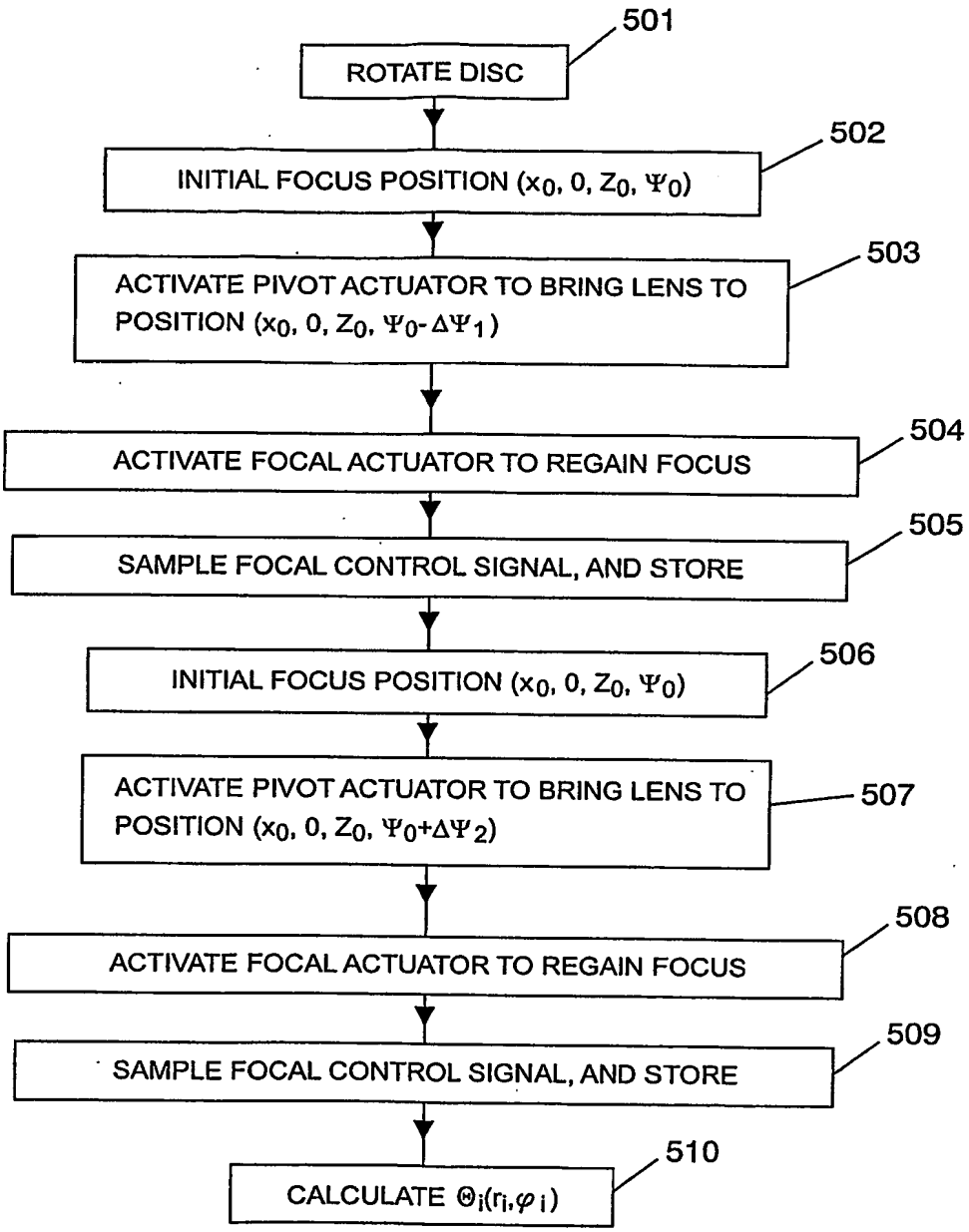
501
ROTATE DISC
502
INITIAL FOCUS POSITION (x_0, 0, Z_0, Ψ_0)
503
ACTIVATE PIVOT ACTUATOR TO BRING LENS TO POSITION (x_0, 0, Z_0, Ψ_0-$\Delta\Psi_1$)
504
ACTIVATE FOCAL ACTUATOR TO REGAIN FOCUS
505
SAMPLE FOCAL CONTROL SIGNAL, AND STORE
506
INITIAL FOCUS POSITION (x_0, 0, Z_0, Ψ_0)
507
ACTIVATE PIVOT ACTUATOR TO BRING LENS TO POSITION (x_0, 0, Z_0, Ψ_0+$\Delta\Psi_2$)
508
ACTIVATE FOCAL ACTUATOR TO REGAIN FOCUS
509
SAMPLE FOCAL CONTROL SIGNAL, AND STORE
510
CALCULATE $\Theta_i(r_i,\varphi_i)$

FIG.5A

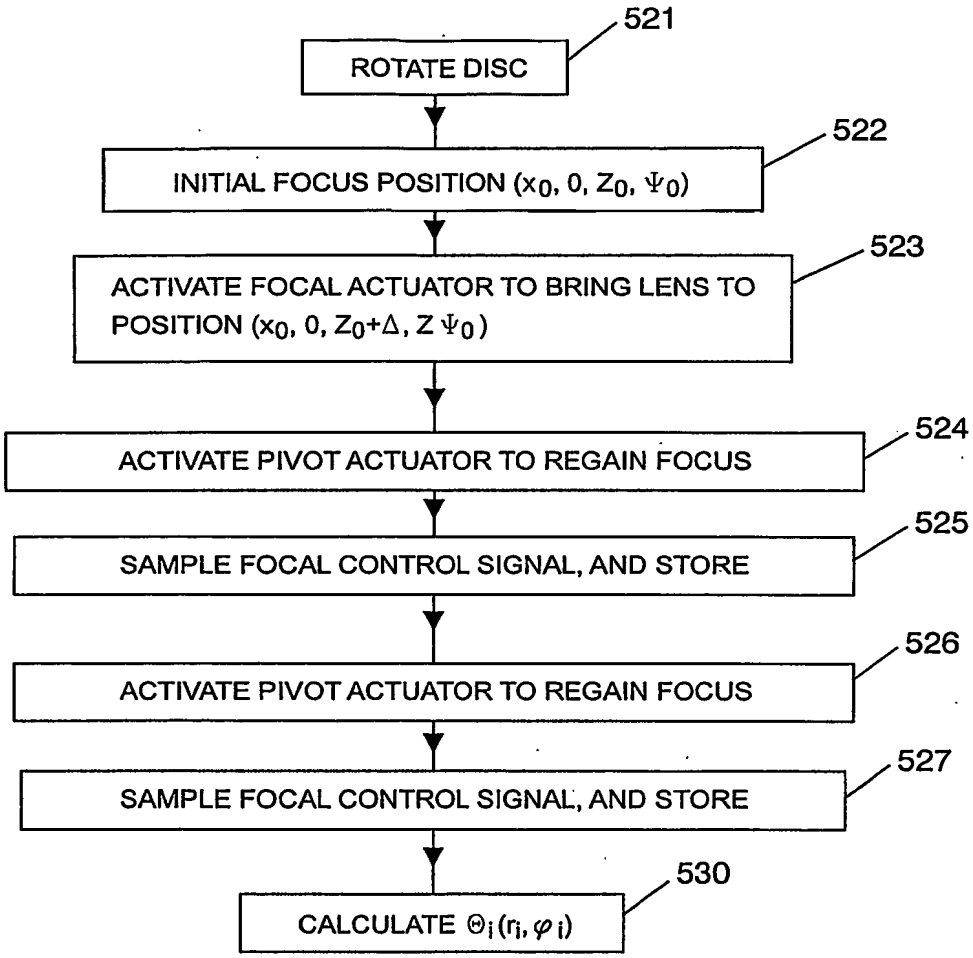
521
ROTATE DISC
522
INITIAL FOCUS POSITION (x_0, 0, Z_0, Ψ_0)
523
ACTIVATE FOCAL ACTUATOR TO BRING LENS TO POSITION (x_0, 0, $Z_0+\Delta$, Z Ψ_0)
524
ACTIVATE PIVOT ACTUATOR TO REGAIN FOCUS
525
SAMPLE FOCAL CONTROL SIGNAL, AND STORE
526
ACTIVATE PIVOT ACTUATOR TO REGAIN FOCUS
527
SAMPLE FOCAL CONTROL SIGNAL, AND STORE
530
CALCULATE $\Theta_i(r_i, \varphi_i)$

FIG.5B

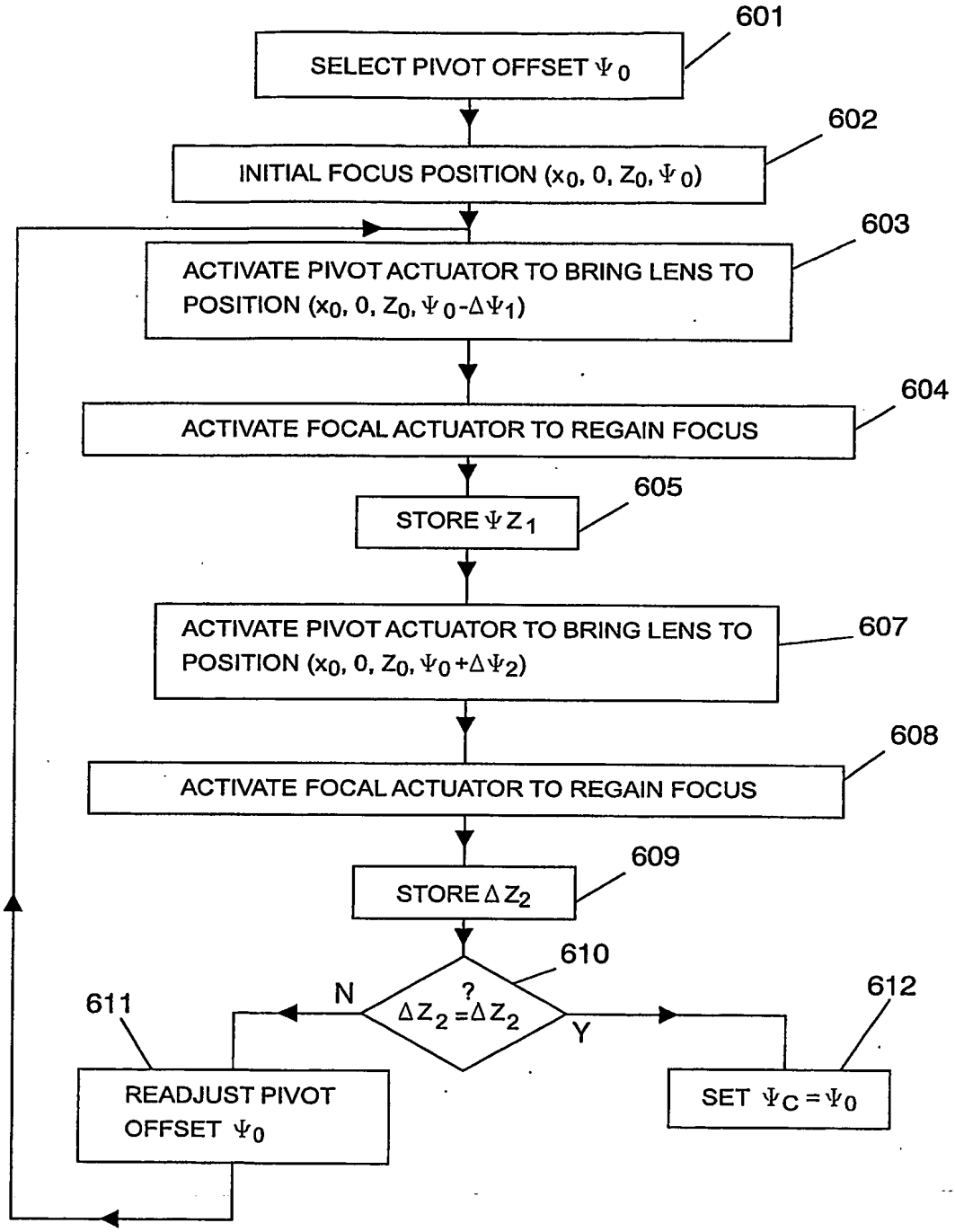
601
SELECT PIVOT OFFSET Ψ_0
602
INITIAL FOCUS POSITION (x_0, 0, Z_0, Ψ_0)
603
ACTIVATE PIVOT ACTUATOR TO BRING LENS TO POSITION (x_0, 0, Z_0, Ψ_0-$\Delta\Psi_1$)
604
ACTIVATE FOCAL ACTUATOR TO REGAIN FOCUS
605
STORE ΨZ_1
607
ACTIVATE PIVOT ACTUATOR TO BRING LENS TO POSITION (x_0, 0, Z_0, Ψ_0+$\Delta\Psi_2$)
608
ACTIVATE FOCAL ACTUATOR TO REGAIN FOCUS
609
STORE ΔZ_2
610
$\Delta Z_2 \stackrel{?}{=} \Delta Z_2$
N
Y
611
READJUST PIVOT OFFSET Ψ_0
612
SET $\Psi_C = \Psi_0$

FIG.6A

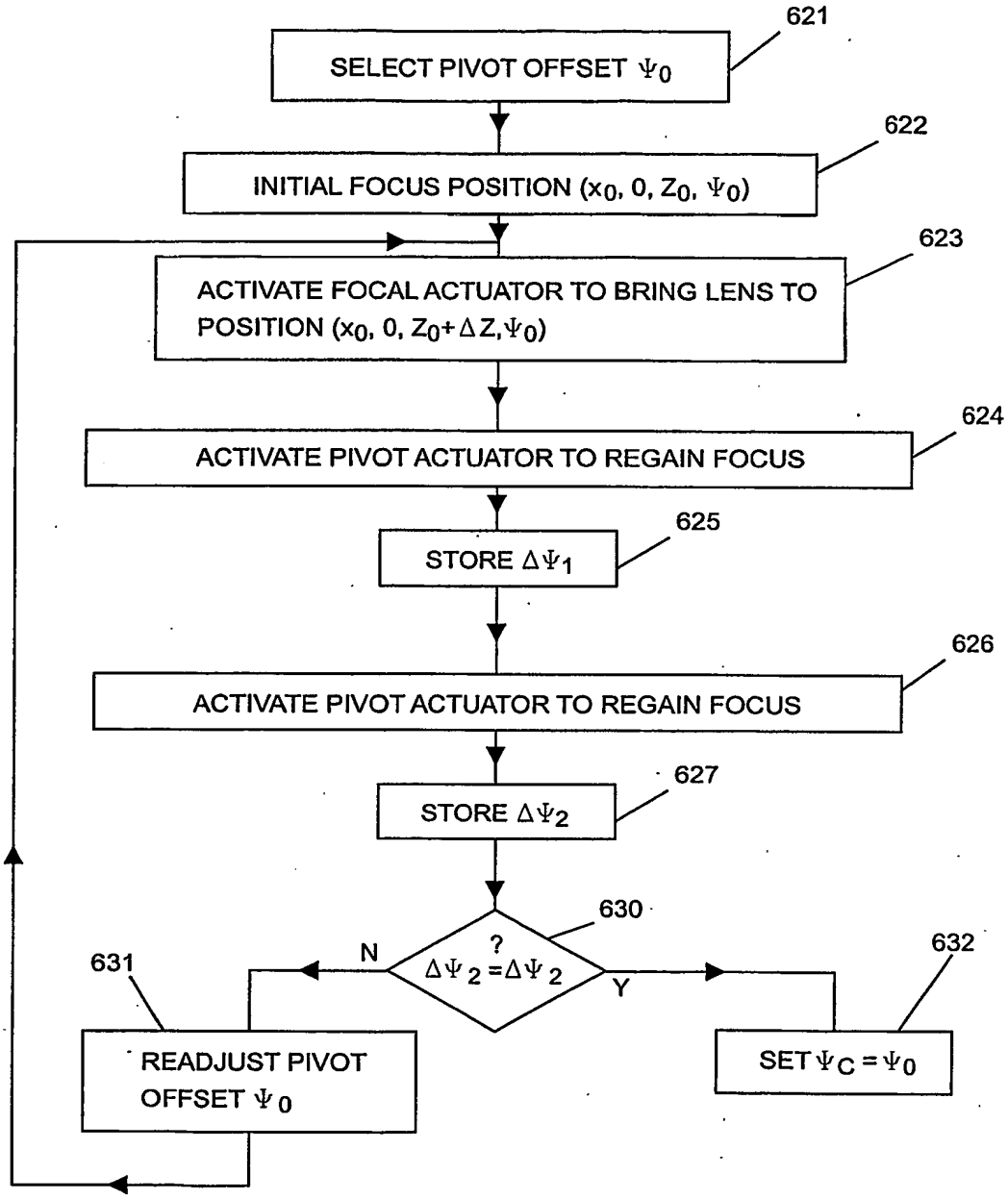
621
SELECT PIVOT OFFSET Ψ_0
622
INITIAL FOCUS POSITION (x_0, 0, Z_0, Ψ_0)
623
ACTIVATE FOCAL ACTUATOR TO BRING LENS TO POSITION (x_0, 0, $Z_0+\Delta Z, \Psi_0$)
624
ACTIVATE PIVOT ACTUATOR TO REGAIN FOCUS
625
STORE $\Delta\Psi_1$
626
ACTIVATE PIVOT ACTUATOR TO REGAIN FOCUS
627
STORE $\Delta\Psi_2$
630
? $\Delta\Psi_2 = \Delta\Psi_2$
N
Y
631
READJUST PIVOT OFFSET Ψ_0
632
SET $\Psi_C = \Psi_0$

FIG.6B